



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2018-0109; Product Identifier 2018-NM-022-AD; Amendment 39-19196; AD 2018-04-01]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Airbus Model A320-271N, A321-271N, and A321-272N airplanes. This AD requires de-pairing certain International Aero Engines (IAE) engines in order to continue to operate affected airplanes and discontinuing extended operations (ETOPS) for airplanes with at least one affected engine. This AD was prompted by reports of two engine in-flight shutdowns (IFSDs) and two rejected takeoffs. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD becomes effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0109; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW, Renton, WA 98057-3356; telephone: 425-227-1405; fax: 425-227-1149.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Emergency Airworthiness Directive 2018-0041-E, dated February 9, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for Airbus Model A320-271N, A321-271N, and A321-272N airplanes, with certain IAE engines. The MCAI states:

Several occurrences of engine in-flight shut-down (IFSD) and Rejected Take-Off (RTO) have been reported on certain Airbus A320neo family aeroplanes. While investigation is ongoing to determine the root cause, preliminary findings indicate that the affected engines, which have high pressure compressor aft hub modification embodied from ESN P770450, are more susceptible to IFSD.

This condition, if not corrected, could lead to dual engine IFSD.

To address this potentially unsafe condition, Airbus issued Alert Operators Transmission (AOT) A71N014-18, providing instructions to de-pair the affected engines and discontinue Extended range Two-engine aeroplanes Operations (ETOPS) for aircraft fitted with affected engines.

For the reasons described above, this [EASA] AD requires implementation of operational restrictions.

This [EASA] AD is considered to be an interim action and further AD action may follow.

The unsafe condition is a high-pressure compressor (HPC) rear hub knife edge seal fracture, which could lead to a sudden increase in high rotor vibration and stall in

certain IAE PW1100G-JM engines, and consequent IFSDs and rejected takeoffs. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0109.

#### **FAA's Determination and Requirements of this AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because of an unacceptable rate of IFSDs and rejected takeoffs on affected airplanes. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable. In addition, for the reasons stated above we find that good cause exists for making this amendment effective in less than 30 days.

#### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an

address listed under the ADDRESSES section. Include “Docket No. FAA-2018-0109; Product Identifier 2018-NM-022-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

### **Costs of Compliance**

We estimate that this AD affects 8 airplanes of U.S. registry.

We recognize that this AD may impose certain operational costs. However, we cannot calculate those costs because we do not know how often the conditions occur. Continued operational safety makes these costs necessary because of the severity of the unsafe condition.

If an operator chooses to replace an affected engine, we estimate it would take 8 work-hours, at \$85 per hour, or \$680 per product.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2018-04-01 Airbus:** Amendment 39-19196; Docket No. FAA-2018-0109; Product Identifier 2018-NM-022-AD.

#### **(a) Effective Date**

This AD becomes effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to Airbus Model A320-271N, A321-271N, and A321-272N airplanes, certificated in any category, all manufacturer serial numbers.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 72, Engine.

**(e) Reason**

This AD was prompted by reports of two engine in-flight shutdowns (IFSDs) and two rejected takeoffs. We are issuing this AD to address a high-pressure compressor (HPC) rear hub knife edge seal fracture, which could lead to a sudden increase in high rotor vibration and stall in certain PW1100G-JM engines, and consequent IFSDs or rejected takeoffs.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Affected Engines**

For the purpose of this AD, affected engines are International Aero Engines Model PW1127G-JM, PW1127GA-JM, PW1130G-JM, PW1133G-JM, and PW1133GA-JM engines, having engine serial numbers P770450 and subsequent.

**(h) Operational Restrictions**

(1) No later than 3 flight cycles after the effective date of this AD, do not operate an airplane having two affected engines installed.

(2) For an airplane having at least one affected engine installed: No later than 1 flight cycle after the effective date of this AD, extended operations (ETOPS) are not allowed.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14



CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (j)(2) of this AD. Information may be emailed to 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA emergency Airworthiness Directive 2018-0041-E, dated February 9, 2018, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0109.

(2) For more information about this AD, contact Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW, Renton, WA 98057-3356; telephone: 425-227-1405; fax: 425-227-1149.

**(k) Material Incorporated by Reference**

None.

Issued in Renton, Washington, on February 12, 2018.

Michael Kaszycki,  
Acting Director,  
System Oversight Division,  
Aircraft Certification Service.

[FR Doc. 2018-03185 Filed: 2/14/2018 8:45 am; Publication Date: 2/15/2018]